

A basic guide to soft soldering

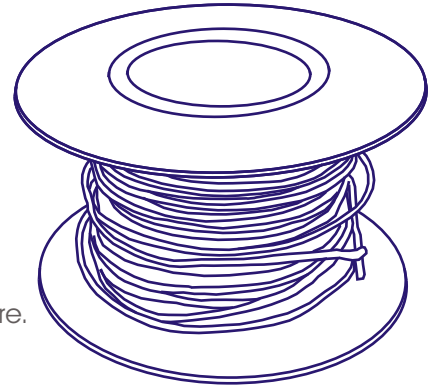
1. **Suitable materials:** Brass, Copper, Zinc, Tin (tin plate), Steel (not stainless), Nickel Silver.

2. **Solders - jointing material**

Standard solder 60/40 will do for most jobs. There are specialist solders for particular jobs, such as *Easy Flowing* for long seams or *Low Melting Solder* for white metal.

The latter should only be used with an iron with an adjustment for temperature.

For electrical connections use *Non Corrosive Resin Cored Solder*.



3. **Fluxes - helps the solder flow & stick to the metal (key)**



Acid Flux will serve most purposes but it will be necessary to wash the joint after construction otherwise it will corrode.

Different fluxes are available for different metals (see Carr's Range).

4. **Soldering irons**

Large soldering jobs require large irons, but for most small model making joints use either a 25 or 40 watt iron.

Preparation of the tip is vital: with *Tin Plated Tips* (Weller) clean with sandpaper or a file. *Iron Plated Tips* (Antex) should only be wire brushed. When the tip is clean, dip in flux then apply a little solder to tin* the tip.

*Tinning - coating a base metal with a thin coat of solder

5. **Soldering**

Make sure that the joint surfaces are clean, then add flux and then solder using the iron so each joint surface has a layer of solder. Put the joint together then apply the soldering iron tip to melt and unite the solder layers to make the joint.

On long joints, start at one end and work your way along to the other end rather than *spot joint*.

